Amendments to the Claims (including presentation of New Claims):

This listing of claims will replace all prior versions of claims in the application.

Listing of the Claims:

Claims 1.-29. Canceled.

30. (New)   A method for the diagnosis of Alzheimer's disease in a patient comprising the steps of:

(1)   providing a sample of an appropriate biological fluid from said patient;

(2)   determining the total butyrylcholinesterase in the sample;

(3)   subjecting the sample to lectin binding analysis to determine the amount of butyrylcholinesterase unbound to concanavalin A (ConA); and

(4)   diagnosing the probable presence of Alzheimer's disease in the patient as a direct correlation to the amount on unbound butyrylcholinesterase, wherein the probability of the presence of Alzheimer's disease increases as the amount of unbound butyrylcholinesterase increases.

31. (New)   A method according to claim 30, wherein said step of determining the total amount of BChe in the sample is carried out by a method selected from enzymatic activity analysis and monoclonal antibody binding.

32. (New)   A method according to claim 30, wherein said step of determining the amount of BChe unbound to ConA is carried out by a method selected from enzymatic activity analysis and monoclonal antibody binding.

33. (New)   A method according to claim 30, wherein said biological fluid is cerebrospinal fluid, blood or blood plasma.

34. (New)   A method according to claim 33, wherein said body fluid is blood plasma, said method including the step of preparing blood plasma from the blood for analysis.

35. (New)   A method according to claim 30, said method further including the steps of:

　　(a)   determining the total acetylcholinesterase in the sample;

　　(b)   subjecting the sample to lectin binding analysis to determine the amount of acetylcholinesterase unbound to ConA and determining the percentage of acetylcholinesterase unbound to ConA;

　　(c)   subjecting the sample to lectin binding analysis to determine the amount of acetylcholinesterase unbound to wheat germ agglutinin (WGA) and calculating the percentage of acetylcholinesterase unbound to WGA;

　　(d)   determining the ratio of acetylcholinesterase unbound to ConA to acetylcholinesterase unbound to WGA wherein a ratio above about 0.95 is characteristic of Alzheimer's Disease.

36. (New)   A method according to Claim 35, wherein butyrylcholinesterase is removed from the sample prior to step (a).